# Chemistry 102 (Summer 2020) Course Guidelines

Instructor: Dr. Conrad Naleway

Flanner Hall Rooms 200C (Best to Correspond by email and then talk on Zoom)

Loyola Chemistry Office: 773-508-3100 Zoom Personal Address: 495 082 9636

Email: cnalewa@luc.edu (do not send g-mail, often ends up in spam folder)

Office Hours: Immediately before and after every class.

Class Hours: Review Sessions: To be announced (weekends or day before exam!)

Text: Chemistry: The Central Science. Theodore E Brown, H Eugene H LeMay, H Eugene LeMay, Bruce E Bursten, Catherine Murphy, Patrick Woodward (Prentice Hall) Can be older editions or e-text!

Please register for MasteringChemistry as soon as possible, there is homework already assigned and exams will often use MasteringChemistry to minimize cheating. (See attachment MC Screen Sheet): Course ID: MCNALEWAYCHEM102SUMMER2020

Please note that the text is a secondary source of information to help clarify concepts presented in lecture. The primary information is presented <u>in class</u> and also appears on website and lecture handout materials.

Basic Calculators will be needed for homework assignments and exams but should have log/trig functions (typically under \$20).

Website: http://www.conradnaleway.net/chem102Summer2020.html

1. Intermolecular Forces and Solutions	(Chapter 11 & 13).	
2. Chemical kinetics, reaction rates, and reaction mechanisms	(Chapter 14).	
3. Chemical equilibrium in gas and liquid phases	(Chapter 15).	
4. Acids and bases, equilibrium in aqueous solutions	(Chapter 16).	
5. Additional aspects of aqueous equilibria	(Chapters 17).	
6. Chemical Thermodynamics: Entropy and Free Energy	(Chapter 19).	
7. Electrochemistry and electron transfer reactions	(Chapter 20).	

Exams: There will be TWO ninety-minute exams and one cumulative final exam. Each exam will consist of questions and problems representative of the text, lecture, and discussion material. A calculator, periodic table, and your PERSONAL class notes may be used during each exam. But NO ACCESS to websites (including our own) or textbook.

Each exam MUST be signed and this signature will be taken as a statement of honest, independent work. Instances of academic dishonesty will warrant immediate failure of the course plus referral to the Arts and Sciences Dean's office. All Exams must be handed directly to the instructor upon completion.

Exams will be graded and returned as soon as possible, usually the following class period. All grading questions, points of clarification, and grading errors must be brought to the instructor's attention during office hours no later than one week after return of the exam.

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## Assignment of Grades: The following scale will be used:

≥ 90% - 100%	A
78% - 89%	В
60% - 77%	C
50% - 59%	D
< 50%	F

<sup>\*</sup> Plus and minus grades will be assigned at the ends of each grade scale

### Final Grade will be assigned according to the following:

The weighted average of the TWO ninety minute exams plus the cumulative FINAL

Here the two ninety minute exams will each be weighed 20%; Final Exam will be weighed 20%

Pre and Post Assignments on MasteringChemistry On-Line Homework will represent 30%

10% of the grade will be based upon participation and completion of in-class within assigned Groups - Group Assignments!

An aim of the grading policy is to allow time and incentive for improvement. Chemistry is not easy to learn, but the process can be rewarding if extensive, daily effort is made to master fundamentals as they appear. Students are urged to contact the instructor to discuss problems before they become serious.

#### **Problem Sets:**

Multiple problem sets will be assigned during the semester based on the text and lecture materials. Assignments will come from both the on-line homework site and possibly supplemented with a few additional assigned problem sets.

# Help/Review Sessions:

In preparation for exams, help/review sessions will be scheduled. Dates, times, and locations will be announced in class.

#### Schedule:

The typical class day will begin with a review or short quiz of material (10-15 minutes total) from preceding class; this will be followed by lecture on new materials and one 5 minute break approximately 2/3 way through period. Following lecture there will be a discussion problem session on topics just covered.

Exam days will begin 15 minutes early with quick review followed by 90 minute exam, which will then be followed by a short lecture after 10 minute break (critical to stay for lecture after exam!)

# Tentative Schedule for Summer Session (Will be discussed 1st Lecture)

M	06/29/20	First Day of Class. We will begin with Intermolecular Forces and Solution Properties.
		5 classes
M	07/13/20	Exam I (Start of Class): Material associated with Chapters 13-14 will be emphasized.  A short lecture will follow the exam
		5 classes
M	07/27/20	Exam II (Start of Class): Material associated with Chapters 15-17 will be emphasized. A short lecture will follow the exam
		4 classes
F	08/7/20	Pseudo-Cumulative Final Exam with Emphasis on most recente chapters. The exam will address "focus topics" to be announced in class.